

THE LIMIT SET OF THE RENORMALIZATION OPERATOR FOR MULTIMODAL MAPS

Speaker: Wang Yimin
Shanghai Normal University

Time: Wed, Jan 4, 9:30-10:30

Tencent room: 948-235-565 Code: 200433

Abstract : Deep renormalizations of an infinitely renormalizable real analytic multimodal map are multimodal maps of type N for some positive integer N . Roughly speaking, multimodal maps of type N are compositions of N unimodal maps. In this talk, we will show the existence of the full renormalization horseshoe for multimodal maps of type N . Moreover, the renormalization operator is exponentially contracting along the hybrid leaves. As a consequence, any orbit of a real analytic multimodal map under the renormalization operator is asymptotic to the union of these horseshoes.